

# Shoulder 好达

SHOULDER ELECTRONICS LIMITED

## CRYSTAL RESONATOR Data Sheet

PRODUCT 产品: CRYSTAL RESONATOR

MODEL NO 型号: ZM309

PREPARED 编制: Fengyu

CHECKED 审核: York

APPROVED 批准: Lijiating

DATE 日期: 2008-01-25

## 1. Features 特性

● Frequency Range: 3.579545-27.000MHz 頻率範圍: 3.579545-27.000MHz

● Suited for portable devices with low current consumption

適合於低功耗的便攜設備

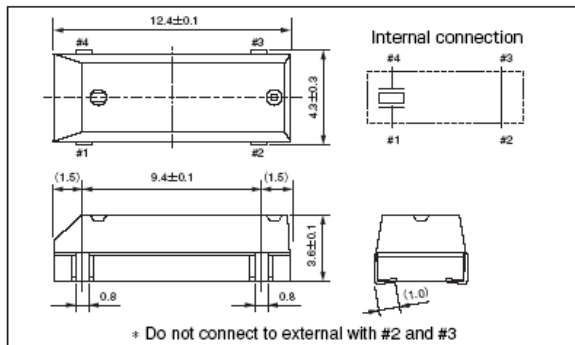
● For a clock source in digital equipments 適用於數碼設備的所 有時鐘源

## 2. STANDARD SPECIFICATIONS 標準規格

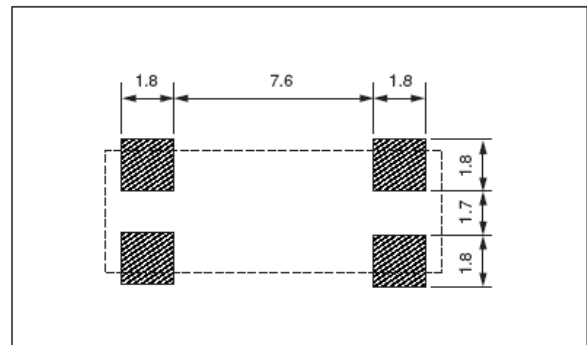
Item	Model	ZM309	Conditions
Frequency Range 頻率范围		3.579545-27.000MHZ	Need to specify
Frequency Tolerance 调整频差		± 50ppm	at 25°C
Freq. Tol. Over Temp. 温度频差		± 50ppm	- 10~+60°C
Operating Temp. Range 工作温度范围		- 10~+60°C	
Storage Temp. Range 保存温度范围		- 40~+85°C	
Series Resistance 谐振电阻		50ΩMax	at 25°C
Load Capacitance 负载电容		12PF	Need to specify
Shunt Capacitance 静态电容		5.0pF Max	
Drive Level 激励电平		100μw Max	
Aging[first year] 年老化率		± 5ppm Max	25 ± 3°C
Insulation Resistance 绝缘阻抗		500Mohm Min	DC100V±15V

### 3. DIMENSION AND SOLDER PAD LAYOUT

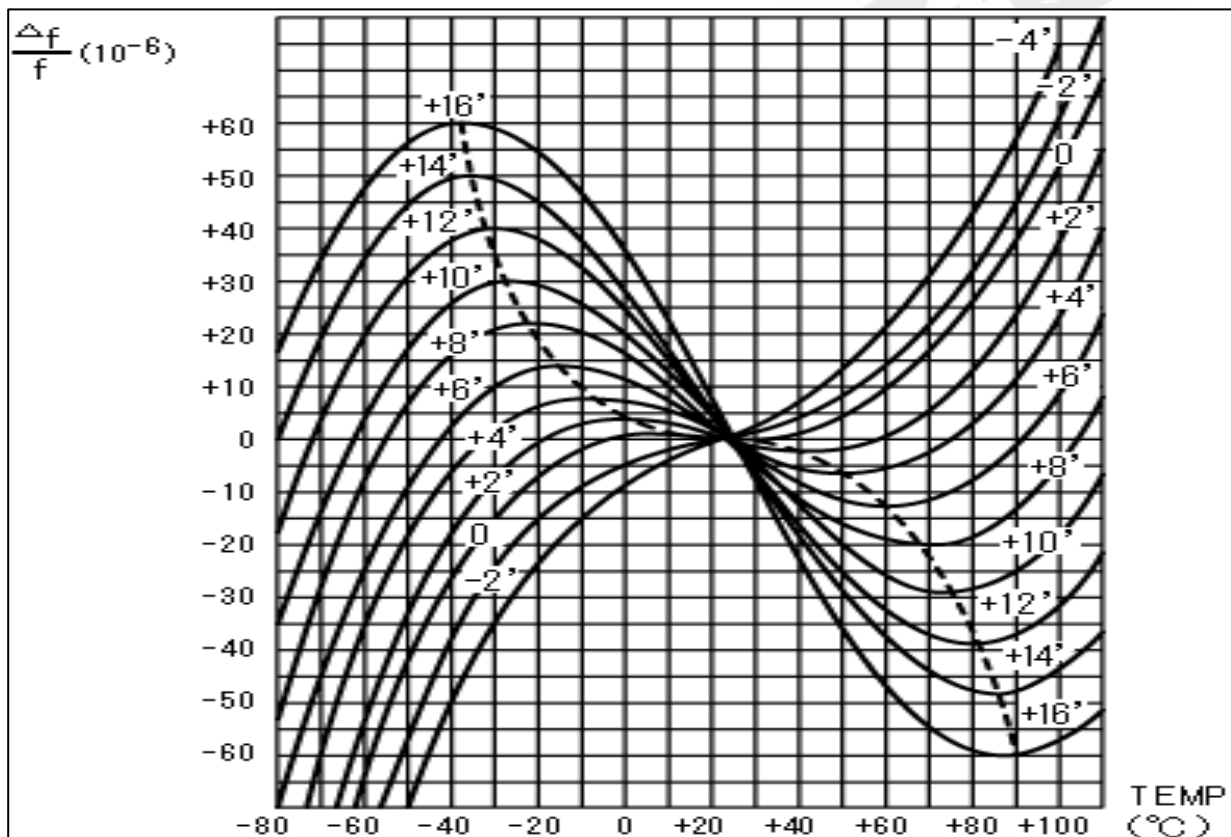
#### ■ DIMENSION [mm]



#### ■ SOLDER PAD LAYOUT [mm]



### 4. FREQUENCY VS. TEMPERATURE CURVE



### 5. ZM309 編帶規格 TAPE AND REEL SPECIFICATION

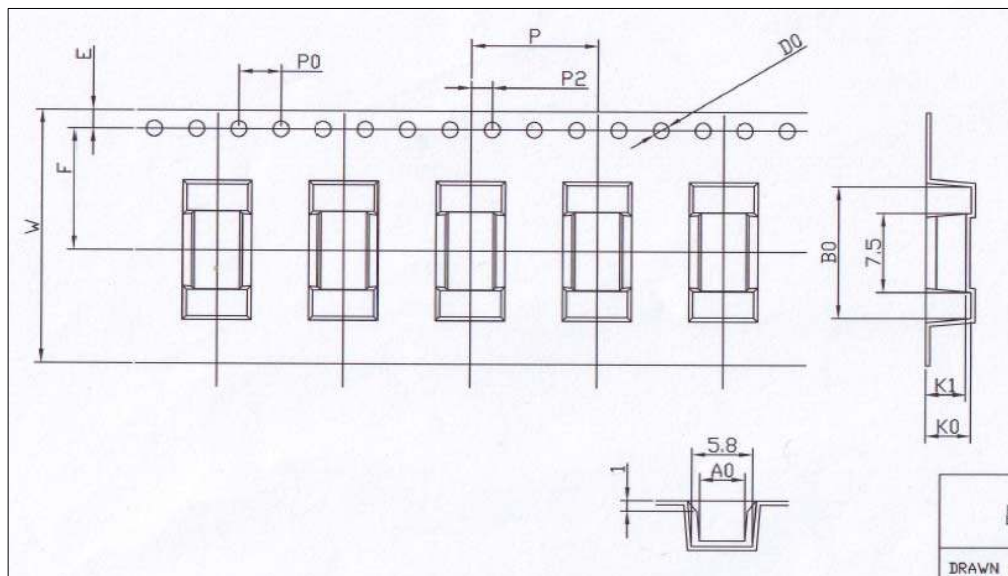
1). 編帶規格符合美國電子工業協會 EIA-481-B 電子元件編帶標準 Tape and Reel form conform to EIA-481-B

2). 每盤的晶體元件數量為 2000 只。The quantity of crystal units per reel shall

be 2000PCS.

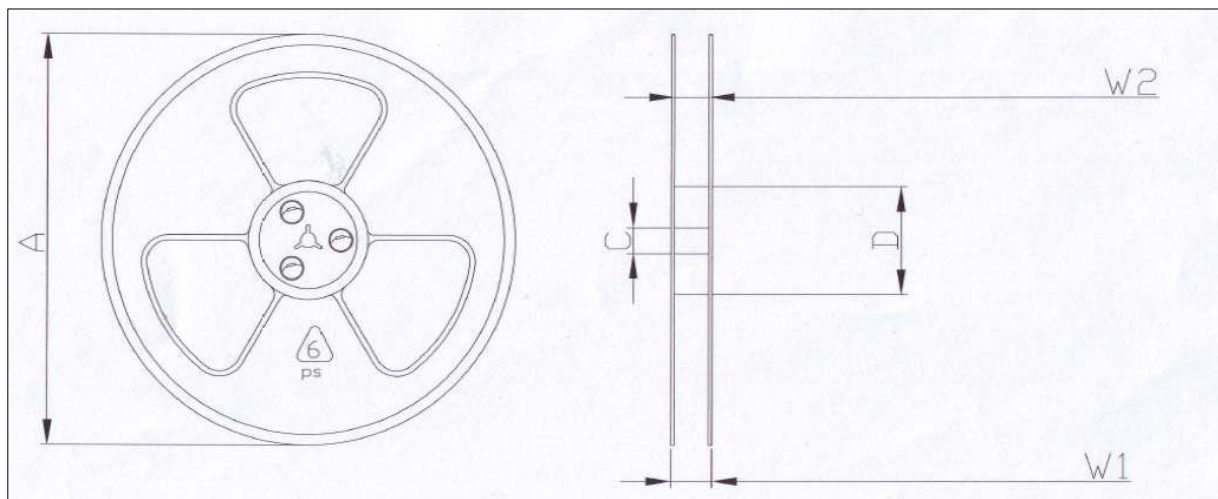
3).在包裝盒及載帶盤的表面貼上標籤，注明必需的資訊 A "LABEL" on which necessary information is clearly written is on the surface of packing box and the reel.

## 6. 載帶尺寸圖 CARRIER TAPE DIMENSIONS



W	A0	B0	E	F	P	P0	P2	D0	K0	K1
24 <sup>+0.30</sup> / <sub>-0.30</sub>	4.5 <sup>+0.10</sup> / <sub>-0.10</sub>	12.8 <sup>+0.10</sup> / <sub>-0.10</sub>	1.75 <sup>+0.10</sup> / <sub>-0.10</sub>	11.5 <sup>+0.10</sup> / <sub>-0.10</sub>	12.0 <sup>+0.10</sup> / <sub>-0.10</sub>	4 <sup>+0.10</sup> / <sub>-0.10</sub>	2 <sup>+0.15</sup> / <sub>-0.15</sub>	Ø1.5 <sup>+0.15</sup> / <sub>-0.00</sub>	4.3 <sup>+0.10</sup> / <sub>-0.10</sub>	3.8 <sup>+0.10</sup> / <sub>-0.10</sub>

## 7. 載帶盤尺寸圖 REEL DIMENSIONS



規格	A±0.5	C±0.2	D±0.3	W1±0.2	W2 <sup>+0.4</sup> <sub>+0.2</sub>
330*100*24	330	25	100	28	24

Shoulder 好达